MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

COVERSHEET

Minister	Hon Shane Jones	**Portfolio**	Resources
Title of Cabinet paper	From the Ground Up – A strategy to unlock New Zealand's geothermal potential: Release for public consultation	**Date to be published**	1 September 2025

List of documents that have been proactively released		
Date	**Title**	**Author**
July 2025	From the Ground Up – A strategy to unlock New Zealand's geothermal potential: Release for public consultation	Office of Minister for Resources
15 July 2025	From the Ground Up – A strategy to unlock New Zealand's geothermal potential: Release for public consultation EXP-25-MIN-0063 Minute of Decision	Cabinet Office
	Note: The version of the draft strategy appended to the Cabinet paper (Appendix 1) is superseded by the final version, which was released for public consultation on 30 July 2025. It can be accessed here: https://www.mbie.govt.nz/dmsdocument/30975-from-the-ground-up-a-draft-strategy-to-unlock-new-zealands-geothermal-potential-pdf	MBIE

Information redacted **YES**

Any information redacted in this document is redacted in accordance with MBIE's policy on Proactive Release and is labelled with the reason for redaction. This may include information that would be redacted if this information was requested under Official Information Act 1982. Where this is the case, the reasons for withholding information are listed below. Where information has been withheld, no public interest has been identified that would outweigh the reasons for withholding it.

Some information has been withheld for the reason of Confidential advice to Government.

In Confidence

Office of the Minister for Resources

Cabinet Economic Policy Committee

From the Ground Up – A strategy to unlock New Zealand's geothermal potential: Release for public consultation

Proposal

1 This paper seeks agreement to consult on a draft geothermal strategy – *From the Ground Up – A strategy to unlock New Zealand's geothermal potential* (Attached at Appendix One).

Relation to government priorities

2 The strategy is aligned with the Government's *Going for Growth* plan. It aims to unlock under-utilised natural resources and strengthen regional economies through tourism, innovation and improved access to energy to underpin production for exports. Geothermal development will be guided by upcoming resource management system reforms and presents a compelling opportunity for foreign investment in New Zealand's renewable infrastructure, supported by recent changes to the Overseas Investment Act 2005.

3 This proposal supports the Government's goals of economic growth, energy security, infrastructure delivery, regulatory efficiency and emissions reduction. Confidential advice to Government

Executive Summary

4 New Zealand has long been recognised for its globally significant geothermal features and ingenuity in harnessing geothermal energy, but we have only scratched the surface of what is possible. This strategy, *From the Ground Up*, is a call to action: to **drive innovation**, **double geothermal energy use by 2040,** and **unlock regional potential**.

5 Our **vision** is for New Zealand to be a *global leader in sustainable geothermal development, delivering innovation, energy resilience, and inclusive growth for future generations.*

6 Advancing geothermal development contributes towards economic resilience, regional revitalisation, and delivering tangible outcomes for Māori, industry, and communities (eg, tourism, job creation and access to heat energy for manufacturing). We are sitting on a resource, indigenous to this land, that is clean, reliable, and globally significant. Yet, development has been fragmented. There are clear opportunities to improve geothermal resource data, streamline the regulatory system, and reduce entry barriers. This

strategy seeks to address these challenges and lay the foundation for long-term, sustainable growth.

7 The strategy is underpinned by three strategic outcomes:

- Extending New Zealand's position as a world-leader in geothermal **innovation**.
- **Accelerating energy resilience** through increased electricity generation and harnessing geothermal heat to support New Zealand's energy transition; **with a goal of doubling geothermal energy use by 2040**.
- **Strengthening regional economies and te Ōhanga Māori** by advancing geothermal development in collaboration with tāngata whenua, unlocking industrial growth, tourism, and trade to support New Zealand's goal of doubling exports.

8 To get there, the strategy includes five key priorities to focus action:

- improving access to **geothermal data and insights** to empower investment, competition and participation;
- ensuring **regulatory and system settings** are fit for purpose to enable sustainable development and innovation;
- advancing **knowledge and uptake of geothermal technologies** to build market confidence and accelerate deployment;
- enabling **place-based geothermal clusters** to catalyse and accelerate place-based development; and
- driving **science, research and innovation** to advance supercritical geothermal technology, and position New Zealand at the cutting edge.

9 I am proposing a pragmatic, phased approach starting with immediate actions in 2025–26 that are ready to go. These include groundwork to establish a national data repository, promoting the role of geothermal in the energy transition, and initiating work to explore and strengthen geothermal regulatory frameworks.

10 I am seeking Cabinet's agreement to release the draft strategy for public consultation from 30 July. This is our chance to test the vision with New Zealanders and refine the roadmap ahead. Graphic design of the strategy is ongoing, and an updated version will be ready for the release date.

Background

11 New Zealand's geography has uniquely positioned us with an abundant and globally significant geothermal resource. I have asked officials to examine why, although we possess this advantage, we still have undeveloped

geothermal capacity, particularly at a time when energy costs are among the highest on record. Officials undertook targeted engagement with iwi and hapū, regional councils, and industry stakeholders during April and May. Feedback confirmed the scale of the opportunity and a strong appetite for government action to help identify and address barriers to geothermal development.

12 Crown-led drilling between the 1950s and 1980s laid the foundation for today's 1.2 GW of installed geothermal electricity generation. However, to meet the growing demand for electricity (projected to grow by approximately 68 per cent over the next 25 years),[1] industrial process heat, and support emerging sectors such as data centres, geothermal energy will be an important part of the wider energy mix. This requires a fresh and strategic approach to how we manage and develop our geothermal resources.

We can double geothermal energy use, and unlock regional and Māori economies through targeted Government action

13 Tourism and geothermal electricity generation have underpinned the sector's development to date, but the added value of geothermal lies across a much broader geoheat spectrum. New Zealand's geology offers a natural advantage, with a thin crust enabling comparatively easier access to high-temperature resources. We also possess numerous low temperature heat zones ideal for geothermal heat transfer applications.

14 New Zealand is well positioned to scale geothermal. The location of geothermal zones close to key linear infrastructure (ie, electricity transmission, supply chains), proven industrial heat uses (ie, timber drying, and ground source heat pumps), and early-stage innovation (ie, super-hot geothermal) demonstrates that the sector already has the enabling factors for success. In 2023, direct use of geothermal energy (across industrial use including cogeneration, agricultural, commercial and residential sectors) amounted to 8.71 PJ.[2] This is around 11 per cent of the direct use for process heat generation provided by natural gas.[3] With the fluctuations in gas prices and supply limitations, the opportunity to substitute some gas-derived direct use heat with geothermal energy is promising.

15 Fragmented data, high entry costs, and regulation that is not fully fit for purpose are hindering progress. Government has a clear role in reducing these barriers through stewardship of subsurface data, enabling policy that facilitates sustainable development of geothermal fields within today's modern context, and targeting investment to support whenua development. The strategic role played by the Crown early on laid the foundation for today's geothermal electricity capacity; another strategic role is needed to unlock the next wave of growth.

[1] Figure from the Government Policy Statement for Electricity (October 2024).
[2] Direct use figure from MBIE's 'Energy balance tables' data.
[3] Some of the natural gas will be providing heat at temperatures above what geothermal could provide such as in petrochemicals and metals manufacturing.

There are a multitude of ways geothermal development can unlock economic growth

16 **Increasing baseload** energy production increases consistent energy to the grid, but also provides opportunities to establish new industries – like powering data centres. The energy produced can also **support industrial heat demand** such as milk drying and timber treatment plants, displacing some fossil fuels in manufacturing. This can happen through direct utilisation of geothermal heat or as a by-product of electricity generation (using 'waste heat'). This could have material impacts for our regional economies.

17 **Lower temperature** resources, which are largely untapped, can provide long-term affordable energy for light industrial use and heat to our built spaces through utilising technology like ground source heat pumps (ideal for some public facilities like hospitals, schools and prisons).

18 **Dissolved minerals and gases** in geothermal fluid also present further value-add opportunities. For example, high-purity silica extraction from geothermal fluid both reduces maintenance costs for geothermal operators and provides promise for use in manufacturing, agriculture and electronics. Further investment into early innovation like this can support the commercial viability of these innovations.

19 For Māori, our geothermal resources are taonga with deep cultural significance. Many fields lie on whenua Māori. The strategy aims to reduce barriers to Māori-led development and support access to data, investment options, and consenting pathways helping to **drive Māori economic outcomes**. Ongoing engagement and responsiveness to the Wai 2358 inquiry will be central to implementation.

20 Further, demonstration of our internationally renowned geothermal taonga as unique surface features delivers significant value across the **tourism and wellness** sectors, offering increased export and employment opportunities.

21 New Zealand is also well-positioned to lead in **supercritical geothermal development**. This next frontier requires investment in research and development, capability building and updates to regulatory systems to support a supercritical programme to reach commercial scale. The Coalition Government's support of the initial drilling programme by ring-fencing $60 million from the Regional Infrastructure Fund will assist in positioning New Zealand at the cutting edge of geothermal science.

22 Development of New Zealand's supercritical geothermal sector along with the expansion of other geothermal activities will enhance our **intellectual, education and innovation export** opportunities, delivering greater value to our international partnerships and trade outcomes.

A geothermal strategy will guide the sector, tāngata whenua, landowners and government to focus on priority actions over three phases

23 Delivering economic growth requires us to set a clear strategic direction and bold national ambition. *From the Ground Up – A strategy to unlock New Zealand's geothermal potential* sets out that **vision**:

For New Zealand to be a global leader in sustainable geothermal development, delivering innovation, energy resilience, and inclusive growth for future generations.

24 Realising this ambition will deliver three strategic outcomes related to accelerating our leadership in **innovation** – including by leveraging advancements in supercritical geothermal; improving New Zealand's **energy resilience** – championing the goal of doubling New Zealand's geothermal energy use by 2040 across the broad energy spectrum; and strengthening **regional and Māori economies** – by protecting our taonga and improving access to our geothermal resources' true value. Achieving these outcomes will make a material contribution to the Government's growth agenda, regional economies and our climate change goals.

25 To drive change, the strategy is anchored by five mutually reinforcing action plan goals, each designed to unlock geothermal potential and accelerate New Zealand's energy transition.These goals will be delivered through phased actions across three time horizons.

- **Horizon One (2025–2026):** Immediate actions to address known barriers and build momentum, including improving geothermal data access, establishing governance structures, promoting the role of geothermal in the energy transition, and assessing regulatory frameworks.
- **Horizon Two (2027–2028):** Medium-term actions that build on Horizon One, such as initiating regulatory reform, expanded mapping of geothermal resources, and development of pilot projects.
- **Horizon Three (2029 onwards):** Long-term actions focused on innovation, infrastructure investment, and scaling up supercritical geothermal technologies.

I propose a considered and deliberate approach to development

26 While I believe there is significant scope for development, I recognise that with all development, there will be trade-offs. New Zealand has world-leading expertise in developing geothermal resource and is demonstrating the ability to develop geothermal fields while sustaining the systems. However, development can alter systems. I want us to have a sensible discussion with New Zealanders about the choices we have and how far we should be going to derive enduring, generational value from our incredible geothermal resource. As a starting point, I am proposing to retain our valuable protected

geothermal fields[4] – which are home to internationally renowned surface features and precious taonga, bringing significant regional and tourism value. However, I am open to seeking advice from officials on whether changes could be considered for other fields.

Delivering on our strategic vision requires cross-portfolio coordination

27 Delivering tangible outcomes will require coordination across several ministerial portfolios including resources, science, innovation and technology, energy, environment, Māori development, regional development, and finance.

28 Ongoing reforms to the resource management system present a timely opportunity to ensure geothermal regulation is fit for purpose. A modernised resource management system must support sustainable development across the full spectrum of geothermal uses, including emerging applications such as supercritical technologies. Place-based policy and spatial planning can play a catalytic role by aligning infrastructure, funding, and consenting tools. Targeted regulatory adjustments developed through coordinated ministerial collaboration will be essential to unlock investment (both domestic and international), enable innovation, and ensure opportunities for Māori and regional communities.

Public consultation

29 The draft strategy is attached at Appendix One. Graphic design for the strategy is ongoing and an updated version will be ready for public release. I am seeking agreement to release the draft strategy for public consultation on 30 July 2025 for six weeks. Following consultation, I will return to Cabinet with a final strategy for consideration.

Cost-of-living Implications

30 There are no cost-of-living implications associated with this paper.

Financial Implications

31 There are no direct funding decisions sought through this paper. However, the implementation of the geothermal strategy may give rise to future fiscal implications which will be sought through future Cabinet approvals.

Legislative Implications

32 This paper does not propose any immediate legislative changes.

33 However, should Cabinet agree to proceed with the strategy following public consultation, it is likely that legislative and regulatory amendments will be recommended to fully implement key aspects of the action plan.

[4] Protected systems contain vulnerable geothermal systems valued for their cultural and scientific characteristics. Their protected status ensures that their underground geothermal water source cannot be extracted and that the surface features are not damaged by unsuitable land uses.

Regulatory Impact Statement

34 No decisions in this paper require a regulatory impact assessment.

Climate Implications of Policy Assessment

35 No decisions in this paper require a Climate Implications of Policy Assessment.

Population Implications

36 There are no population implications with this paper.

Human Rights

37 There are no human rights implications associated with this paper.

Use of external resources

38 I have not used any external resources in the development of the draft strategy.

Consultation

39 The Ministry of Business, Innovation and Employment (MBIE) has undertaken early engagement with key stakeholders, including iwi and hapū, regional councils, and representatives from the geothermal sector to inform the development of the draft strategy and action plan. Officials will continue to engage proactively with Māori stakeholders, particularly in light of the ongoing Wai 2358 Waitangi Tribunal inquiry into Māori rights and interests in geothermal resources.

40 Central government agencies consulted in the development of the draft strategy and action plan include: the Treasury; Energy Efficiency and Conservation Authority; Ministry for the Environment; Department of Internal Affairs; Department of Conservation; New Zealand Trade and Enterprise; Crown Law; Te Puni Kōkiri; Ministry for Primary Industries; and the Ministry of Foreign Affairs and Trade. Feedback from these agencies has informed the strategic framework, the scope and sequencing of proposed actions, and alignment with broader government priorities.

Communications

41 Following Cabinet endorsement, I intend to release the draft geothermal strategy and accompanying action plan for public consultation at a stakeholder event during the New Zealand Geothermal Week on 30 July 2025 in Taupō. The release will be supported by a press release and publication on the MBIE website. MBIE will lead broader sector communication, including engagement with local government, Māori, and industry.

42 Communications products will acknowledge the ongoing Wai 2358 inquiry and reiterate the draft strategy does not pre-empt Tribunal findings.

Proactive Release

43 I intend to proactively release this paper, and consultation materials.

Recommendations

The Minister for Resources recommends that the Committee:

1 note that New Zealand has a globally significant geothermal resource, with the potential to support economic growth, regional development, emissions reduction, and Māori economic participation;

2 note that the attached draft strategy includes an ambitious target to double geothermal energy use by 2040; three strategic outcomes focussed on innovation, energy resilience and economic growth; and actions centred on five goals;

3 note that successful implementation of the geothermal strategy will require coordinated action across multiple ministerial portfolios, including resources, energy, science, innovation and technology, environment, Māori development, regional development, and finance, and that officials will continue to engage across agencies to support integrated delivery;

4 note that the Waitangi Tribunal inquiry into National Freshwater and Geothermal Resources (Wai 2358) is ongoing, and outcomes will be considered as the strategy develops;

5 agree to release the draft geothermal strategy; *From the Ground Up – A strategy to unlock New Zealand's geothermal potential*, on 30 July for public consultation over a period of six weeks;

6 invite the Minister for Resources to report back to Cabinet with a final geothermal strategy and implementation roadmap, and any funding implications, following public consultation by late 2025; and

7 authorise the Minister for Resources to make minor and technical decisions necessary to finalise the consultation materials and manage the consultation process.

Authorised for lodgement

Hon Shane Jones

Minister for Resources

Appendix 1 – Draft Strategy